



CIVIL AIR PATROL - NORTHEAST REGION
 UNITED STATES AIR FORCE AUXILIARY
 PO Box 2379
 SOUTH PORTLAND, ME 04116-2379



CONNECTICUT • MAINE • MASSACHUSETTS • NEW HAMPSHIRE • NEW JERSEY • NEW YORK • PENNSYLVANIA • RHODE ISLAND • VERMONT



REMINDER

Yearly Safety Surveys are Due by January 31st

Director of Safety

Paul Mondoux Lt Col, CAP
 pmondoux@ner.cap.gov
 Cell: 603-759-0178

- NER Website
<http://www.ner.cap.gov/>
- National Safety Pages
<http://members.gocivilairpatrol.com/safety/>

Inside this issue:

Stress Related to Aviation a Review	2
Weather Tips	3
Turning and signaling	3
Winter Terms	4
Car survival	5
Rhythm and Blues	6
Safety Tips	7

January

Newsletter Date

01-01-2013

New Year Resolutions



A New Year is here and I always like to review at this time of year to pass on topics from previous years. Over the years I have spent time trying to give you something meaningful. So in this edition you will find some previous articles that I have presented for you to share and expand upon during your meetings.

New Year's has always been a time for looking back, and more importantly, forward to the coming year. It's a time to reflect on the changes we want (or need) to make and resolve to follow through on those changes.

New Year's Resolutions are fun to make but extremely difficult to maintain.

Each January, many of us resolve to better ourselves in some way. With that said many of us actually make good on those resolutions. While about 75 percent of people stick to their goals for at least a

week, less than half are still on target six months later. It's hard to keep up the enthusiasm months after you've swept up the confetti, but it's not impossible.

So think about this and this year, pick one that you can keep.

Let's all strive to be more safety conscious. Doing so will benefit all of us and bring in the New Year on a positive note.



Have you made your New Year's resolutions yet? Goals related to health, personal finance or relationships may top your list, Think about what can we do to better CAP, To help others in Need, Be better neighbors.

From the NER Commander and all the NER Staff

Thank you and Happy New Year

Review Stress Related to Aviation



You have seen this before but it is time to review— Stress is defined as "any event which may make demands upon the organism, and set in motion a non-specific bodily response which leads to a variety of temporary or permanent physiological or structural changes".

In aviation, accidents almost always occur in a sequence of mistakes made, like a domino effect. Stress is the finger that many times pushes the first domino into the rest causing the effect. In order to maintain safety in aviation, at least one of these dominos must be removed to avoid a dreadful accident. This is where all of human factor studies and hard work can come into play. Depending on what particular job a person is performing in aviation, they must take steps to avoid undue stress. Stress can be avoided by taking steps to relieve other possible factors. Physical factors such as getting plenty of rest, eating a balanced diet and drinking plenty of water while exercising regularly will help the body resist fatigue and stress. Mental factors are equally as important. Knowing one's job well and being confident in the execution of job duties will equally reduce stress. The equilibrium of physical and mental factors does not completely destroy the stress factor, but it will make it manageable and thus safer for everyone.



Handling Stress

People cope with stress in many ways. Specialists say that the first step in coping is to identify stressors and the symptoms that occur after exposure to those stressors. Other recommendations involve development or maintenance of a healthy lifestyle, with adequate rest and exercise, a healthy diet, limited consumption of alcoholic drinks and avoidance of tobacco products

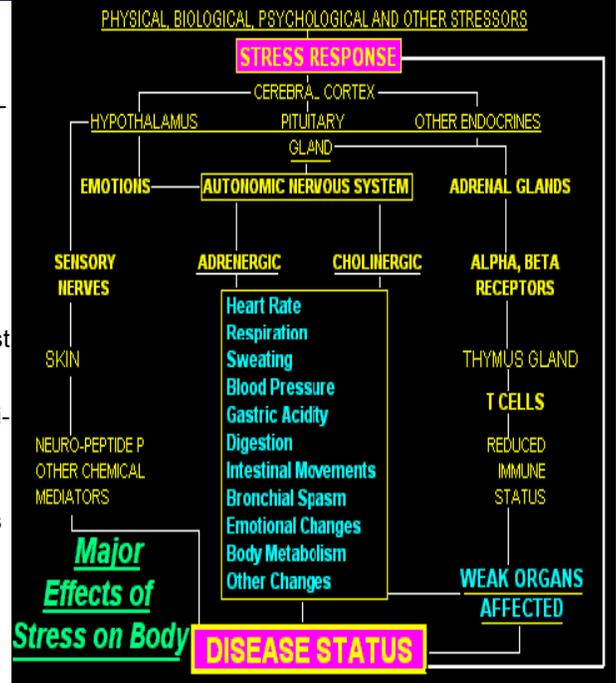
Physically

- Maintain good physical fitness
- Have regular meals
- Have sufficient sleep
- Sound time management
- Control the physical environment

Psychologically

- Sound preparation with regard to knowledge, skills and procedures
- Have confidence in your training and ability
- Have a well balanced social, family life so that financial, domestic worries are not a problem
- Share and discuss problems so as not to bottle them up
- Solve problems as soon as possible to prevent snowball effect

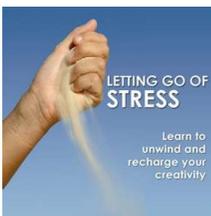
The image above shows a complex process of how stress affects the different parts of the body.



To put it simply, the "victim" will experience the following main symptoms

- Physical symptoms
- Tense muscles, especially in the neck and shoulders;
 - Headache or backache;
 - Stomachache, nausea, vomiting, diarrhea or constipation;
 - Tiredness or difficulty sleeping;
 - Unusually rapid heartbeat;
 - Shakiness or excessive sweating;
 - Weight loss or weight gain;
 - Clenched jaw or clenched teeth;
 - Fingernail-biting;
 - Sighing or changes in breathing patterns; and,
 - Decreased interest in sex.
- Emotional symptoms
- Frustration, irritability or anger;
 - Depression or anxiety;
 - Nervousness; and,
 - Boredom or apathy.
- Behavioral symptoms
- Abuse of alcohol, drugs or other substances;
 - Marital problems;
 - Binge eating; and,
 - Self-destructive behavior.
- Cognitive symptoms
- Forgetfulness, preoccupation and difficulty concentrating;
 - Indecisiveness;
 - Work mistakes and loss of productivity;
 - Excessive worry;
 - Decrease in creativity; and,
 - Loss of sense of humor

This is from AviationKnowledge
Aviation WikiJournal
<http://aviationknowledge.wikidot.com/aviation:stress-in-aviation>



<http://aviationknowledge.wikidot.com/aviation:stress-in-aviation>



Don't wait until winter to go shopping for the supplies you'll need during an ice storm. Stock up and prepare for a winter storm in the off-season. If you wait until the meteorologist's dire forecast in the days before a storm, you'll find yourself scrambling for ever-diminishing goods on store shelves. If you have a fireplace, stock up on cord wood. Also stock up on wool blankets, down comforters and layers of clothing. Have plenty of batteries of all types for flashlights and radios.

Keep flashlights in the same place at all times so you know where they are when the power goes out. Use the bigger lantern-type flashlights for power outages. They can light up a whole room and make life a lot easier during

your time of inconvenience. Don't use candles, any type of fuel or open flame for a light source inside. This creates a major safety hazard, especially when you fall asleep.

Keep a large cooler and blocks of blue ice on hand. Blue ice is a plastic-sealed container of coolant used in coolers for camping trips and can be found at any outdoors/sporting goods store. Freeze and store the blue ice in your freezer. When the power goes out put the blocks in the cooler along with all of your perishable food items. A few blocks of blue ice in a cooler should keep your perishables cold for a couple of days. Of course, since it is winter, you could also keep your perishables outside, but this depends on what the actual temperature is during the daylight hours and whether there is snow and ice to place them in.

Turning and Signaling

Many crashes occur because of improper turning, or turning without due care and attention. To make a safe turn you should:

- Decide well ahead of the spot where you are going to turn. A turn made at the last minute is more likely to cause a crash.

- Before moving into the proper lane you should:

1. Signal your intent.
2. Check the mirror for traffic behind you.
3. Check the "blind spot" in the direction you want to turn.

- Move into the lane from which you will be making the turn when the way is clear. In fast or heavy traffic you must prepare for the turn well in advance by moving into the proper lane.

- If you are already in the proper lane you must signal at least 100 feet before the turn. On the highway you should signal at least 500 feet before the turn.

- Finish the turn in the proper lane. The safest way to turn is by crossing as few lanes of traffic as you can.

Signal when you slow your vehicle or stop suddenly

Your brake lights let people know that you are slowing down, but they do not indicate how much. When you are going to slow down at a place where another driver does not expect it, quickly "tap" your brakes 3 or 4 times.

Signal before slowing down:

- To turn off a highway, which has no designated lane to reduce your speed.
- To park or turn into a driveway. This is important when you park or turn just before reaching an intersection. The driver behind you will expect you to continue until you reach the intersection.
- To avoid something in the road ahead of you which the driver behind and you cannot see.



Winter Weather Terms

A Time for Review

Watches

Winter Storm Watch: Issued for the possibility of severe life-threatening winter weather conditions including: heavy snow, heavy ice and/or near blizzard conditions. Forecasters are typically 50 percent confident that severe winter weather will materialize when a watch is issued.

Blizzard Watch: Issued for the possibility of blizzard conditions. Forecasters are typically 50 percent confident that blizzard conditions will materialize when a blizzard watch is issued.

Lake-Effect Snow Watch: Issued for the potential for heavy lake effect snow.

Wind Chill Watch: Issued for the potential of wind chills of -25F or less, which can cause rapid frostbite and increase the risk of hypothermia.

Warnings

Winter Storm Warning: Issued for a combination of heavy snow and/or ice, of which, at least one exceeds or meets warning criteria. Winter weather is expected to cause life-threatening public impact for a combination of winter hazards including heavy snow, ice, near blizzard conditions, blowing and drifting snow and/or dangerous wind chills.

Heavy Snow Warning: Issued when 7 inches or more of snow is expected in 12 hours or less, or 9 inches or more is expected in 24 hours or less. Heavy Snow Warnings are issued when there is a high degree of confidence that the entire event will be snow.

Ice Storm Warning: Issued for a ½ inch or more of ice accumulation which causes damage to power lines and trees. Ice Storm Warnings are issued when there is a high degree of confidence that the entire event is expected to be ice.

Blizzard Warning: Issued when blizzard conditions are imminent or expected in the next 12 to 24 hours. Blizzard conditions include sustained or frequent gusts of or above 35 mph AND considerable falling, blowing and drifting of snow reducing visibilities frequently 1/4 mile.

Lake-Effect Snow Warning: Issued for 7 inches or more of lake-effect snow.

Wind Chill Warning: Issued when the wind chill is expected to be -25F or less. Frostbite can occur in less than 10 minutes.

Advisories

Winter Weather Advisory: Issued for a hazardous combination of snow, and ice of which neither meets or exceeds warning criteria. Issued for winter weather that will cause significant inconveniences or could be life-threatening if the proper precautions are not taken.

Snow Advisory: Issued when an average of 4 to 6 inches of snow is expected in 12 hours or less. Snow advisories are issued when there is a high degree of confidence that the entire event will be snow.

Freezing Rain Advisory: Any accumulation of freezing rain that can make roads slippery. Freezing rain advisories will only be issued when there is a high degree of confidence that the entire event will be freezing rain only.

Snow and Blowing Snow Advisory: Sustained wind or frequent gusts of 25 to 34 mph accompanied by falling and blowing snow, occasionally reducing visibility to a 1/4 mile or less for three hours or more.

Blowing Snow Advisory: Widespread or localized blowing snow reducing visibilities to a 1/4 or less with winds less than 35 mph.

Lake-Effect Snow Advisory: Issued for an average of 4 to 6 inches of lake effect snow.

Wind Chill Advisory: Issued for wind chills of -15F to -24F. Frostbite can occur in less than 30 minutes.





Survival Tips in your CAR

Everyone should be cautious about traveling in extreme winter weather. Cold, snow and ice are demanding on cars, drivers and passengers. Cold affects metal,

rubber and other materials in your car. It can reduce the effectiveness of your vehicle's battery by at least 50 percent.

It can freeze tires and keep them flat on the bottom for at least the first half-mile of travel. It can thicken your car's lubricants, making the engine work too hard. Most importantly, extreme winter weather can threaten your life.

Plan Before You Travel

Simple planning can save you trouble and even save your life.

Prepare Your Vehicle

Be sure your vehicle is in good winter driving condition. Keep your gas tank at least one-half full.

Be Aware of the Weather

Listen to forecasts, road reports and storm warnings. Dress appropriately. Pack extra scarves and mittens. Allow extra time for trips in severe weather.

Make Yourself Easy to Find

Tell someone where you are going and the route you will take. Report your safe arrival. If you stall or get stuck, tie a colored banner to your antenna or hang it out a window. At night, remove the cover from your dome light and turn the light on. Road crews or rescue units can see a small glow at a

Making a Winter Driving Survival Kit



- Small candles and matches
- Small, sharp knife and plastic spoons
- Red bandanna or cloth to signal
- Safety vest to be seen if you have to leave the car
- Pencil and paper
- Large plastic garbage bag
- Safety pins
- Whistle
- Snacks
- Cell phone adapter to plug into lighter
- Plastic flashlight and spare batteries

Reverse batteries in the flashlight to avoid accidental switching and burnout. Warm batteries before using them. Store safety

considerable distance. To reduce battery drain, use emergency flashers only if you hear approaching vehicles. Keep one person on watch; don't let everyone rest at the same time.

Stay in Your Vehicle

Walking in a storm can be very dangerous. You might lose your way or become exhausted, collapse and risk your life. Your vehicle is a good shelter.

Avoid Overexertion

Shoveling snow or repositioning your car by pushing it takes a lot of effort in storm conditions. You could risk heart attack or injury. Take it easy!

Keep Cool — Two Ways

1. Calm down and think. The storm will end and you will be found.
2. Don't work enough to get hot and sweaty. Wet clothing loses insulation value, making you susceptible to hypothermia.

Keep Fresh Air in Your Vehicle

It's much better to be cold and awake than comfortably warm and sleepy. Wet or wind-driven snow can plug your vehicle's exhaust system and cause deadly carbon monoxide gas to enter your vehicle. Don't run the engine unless you are sure the exhaust pipe is free of snow. Keep snow off the radiator to prevent the engine from overheating.

Stay Warm Without Fuel

Keep your blood circulating freely by loosening tight clothing, changing positions frequently and moving your arms and legs. Huddle close to one another. Rub your hands together or put them in your armpits or between your legs. Remove your shoes occasionally and rub your feet.

Don't Expect to Be Comfortable

The challenge is to survive until you're found.

items in the passenger compartment when severe winter weather threatens in case the trunk is jammed or frozen shut. Choose small packages of food that you can eat hot or cold.

Suggested food items:

- Raisins in small packets
- Semi-sweet chocolate in pieces for sharing
- Miniature candy bars
- Wrapped hard candies
- Food bars

Store bulky and heavy items in an accessible place:

- 30-foot cord to use as homing line when you must exit the vehicle
- Booster cables
- Basic tools
- Sand, cat litter or other grit in a plastic milk carton
- Shovel
- Tow cables or chain
- Sleeping bag or blankets
- Road flares and reflectors
- Snowmobile suit or heavy outerwear and heavy boots

Rhythm and Blues — from FAA Aviation News—www.faa.gov/pilots/safety/pilotsafetybrochures/.

Federal Aviation Administration

The Concerns about pilot fatigue and fatigue in general is something that we all need to be aware of. This is a good time to review some basics about the human body's circadian rhythm and its impact on safety.

Circadian Rhythm Disruption

Our circadian rhythm is an internal biological clock that regulates body functions based on our wake/sleep cycle. Clear patterns of brain-wave activity, hormone production, cell regeneration, and other biological activities are linked to these daily cycles. Scientists can't explain precisely how the brain "keeps time," but they do know that it relies on outside influences called zeitgebers (German for time givers). The most obvious zeitgeber is daylight.



CRD, Fatigue, and the Flight Environment

Any interruption of the normal circadian rhythm will have physiological and behavioral impacts, known as circadian rhythm disruption (CRD). Shift work, inherent in many aviation jobs, almost always causes CRD because the internal body clock is at odds with the shift schedule. Pilots suffering from CRD may experience difficulty falling and staying asleep, insomnia, daytime sleepiness, a general lack of energy in the morning, difficulty concentrating, oversleeping and trouble getting up, or increased negative moods. The most debilitating symptom of CRD is fatigue, which is a dangerous condition for any pilot attempting to operate an aircraft. Some of the undesired effects include increased reaction time, decreased attention, impaired memory, and emotional irritability. These, in turn, can lead to increased frequency and severity of errors during aircraft operations, increased frequency of operational incidents, and (at a minimum) increased risk in aviation operations.

Resetting the Clock

If you have fallen victim to CRD, it is imperative to reset your biological clock. There are two key actions you can take to accelerate this process. First, expose yourself to as much daylight as possible, because bright light helps reset circadian rhythms. In addition, light has a direct and positive affect by increasing brain serotonin levels. Second, be active! When you arrive in a new time zone, taking a nap is the worst thing you can do because it sets your body's rhythms back to home time. Staying active on arrival will help your body adjust to the new time zone.

Do not let CRD-induced fatigue become a hindrance to aviation safety.

SLEEP DISORDERS

Sleep disorders are a highly common medical issue that affects millions of Americans each year. While some people suffer from mild sleeping problems, such as the occasional nightmare, others have extremely severe sleep disorders that can negatively affect their health if left untreated.



Lack of Sleep

At some point, you are likely to suffer from lack of sleep. However, while our lifestyles, work demands and family responsibilities may keep you from getting the sleep you need, a chronic lack of sleep can trigger the development of serious conditions, including heart disease, depression and hypertension. Common symptoms of lack of sleep include fatigue, blurry vision and irritability.

Excessive Sleep

Although many people suffer from sleep disorders that prevent them from falling and staying asleep, a select group of people actually get too much sleep. Known in medical circles as *hypersomnia*, excessive sleep is clinically defined as getting more than 10 hours of sleep per night and still experiencing daytime drowsiness.

While the particular causes of excessive sleep vary with each individual case, in most instances, treatment for this type of sleep disorder involves making some lifestyle changes.

Disrupted Sleep

Any condition in which your sleep doesn't follow the typical sleep phase cycle or doesn't stay in one or more cycles for long enough is a disrupted sleep disorder. Those who have disrupted sleep tend to not only get less sleep but also to not experience as deep of sleep. Unfortunately, this often means that these individuals don't reach the levels of sleep necessary to be considered "restorative sleep."

To learn more Visit

WebMD <http://www.webmd.com/sleep-disorders/default.htm>



CIVIL AIR PATROL - NORTHEAST REGION

PO Box 2379
SOUTH PORTLAND, ME 04116-2379

Lt Col Paul Mondoux
NER Director of Safety

Phone: 603-759-0178
E-mail: pmondoux@ner.cap.gov

VISIT THE NER Safety Website link
can be found on
<http://www.ner.cap.gov>

**Subscribe to the NER
Email List**
[http://lists.ner.cap.gov/
mailman/listinfo/nersafety](http://lists.ner.cap.gov/mailman/listinfo/nersafety)



Foods to Avoid Feeding Your Pet

- Alcoholic beverages
- Avocado
- Chocolate (all forms)
- Coffee (all forms)
- Fatty foods
- Macadamia nuts
- Moldy or spoiled foods
- Onions, onion powder
- Raisins and grapes
- Salt
- Yeast dough
- Garlic
- Products sweetened with xylitol

Remember—Remember –Remember

We take Safety very seriously and Safety is an everyday thing that needs to be included in everything that we do. Safety can not be neglected or bypassed just because it is more convenient to do so.

BE SAFE

Portable Generator Safety

Portable generators are useful when temporary or remote electric power is needed, but they can be hazardous. The primary hazards to avoid when using them are carbon monoxide poisoning, electric shock or electrocution, and fire.

To Avoid Carbon Monoxide Hazards:

- Always use generators outdoors, away from doors, windows and vents.
- NEVER use generators in homes, garages, basements, crawl spaces, or other enclosed or partially enclosed areas, even with ventilation.
- Follow manufacturer's instructions.
- Install battery-operated or plug-in (with battery backup) carbon monoxide (CO) alarms in your home, following manufacturer's instructions.
- Test CO alarms often and replace batteries when needed.

To Avoid Fire Hazards:

- Before refueling the generator, turn it off and let it cool. Fuel spilled on hot engine parts could ignite.

- Always store fuel outside of living areas in properly labeled, non-glass containers.

- Store fuel away from any fuel-burning appliance.

To Avoid Electrical Hazards:

- Keep the generator dry. Operate on a dry surface under an open, canopy- like structure.
- Dry your hands before touching the generator.
- Plug appliances directly into generator or use a heavy-duty outdoor- rated extension cord. Make sure the entire extension cord is free of cuts or tears and the plug has all 3 prongs, especially a grounding pin.
- NEVER plug the generator into a wall outlet. This practice, known as backfeeding, can cause an electrocution risk to utility workers and others served by the same utility transformer.
- If necessary to connect generator to house wiring to power appliances, have a qualified electrician install appropriate equipment. Or, your utility company may be able to install an appropriate transfer switch